

What is claimed is:

1 1. A mobile station that selects one of a plurality of
2 base stations according to electric field strengths of signals
3 transmitted on control channels corresponding to the plurality
4 of base stations, and establishes first a link and then a call
5 connection with the selected base station on a traffic channel
6 that is assigned via a control channel corresponding to the
7 selected base station,

8 the mobile station comprising:

9 a measuring means for measuring an electric field
10 strength of a signal on the traffic channel when a link
11 operation is performed to establish the link for the traffic
12 channel; and

13 a judging means for judging whether the link operation
14 should be continued according to the measured electric field
15 strength.

1 2. The mobile station of Claim 1,

2 wherein when the measured electric field strength is
3 not more than a predetermined value, the judging means judges
4 that the link operation should be terminated.

1 3. The mobile station of Claim 2 newly selects one of the
2 plurality of base stations and requests the newly selected base
3 station to assign a traffic channel if the judging means has
4 judged that the link operation should be terminated.

1 4. The mobile station of Claim 1,
2 wherein the measured electric field strength includes
3 a signal level and a noise level, the signal level being a
4 reception signal level when a signal is received from the
5 selected base station on the traffic channel, and the noise
6 level being a reception signal level when no signal is received
7 from the selected base station on the traffic channel, and
8 the judging means judges that the link operation should
9 be terminated if the signal level is not more than a first
10 threshold value or a difference between the signal level and
11 the noise level is not more than a second threshold value.

1 5. The mobile station of Claim 4 newly selects one of the
2 plurality of base stations and requests the newly selected base
3 station to assign a traffic channel if the judging means has
4 judged that the link operation should be terminated.

1 6. A mobile station that selects one of a plurality of
2 base stations according to electric field strengths of signals
3 transmitted on control channels corresponding to the plurality
4 of base stations, and establishes first a link and then a call
5 connection with the selected base station on a traffic channel
6 assigned by the selected base station,

7 the mobile station comprising:

8 a requesting means for issuing a traffic channel
9 assignment request to the selected base station on a control

10 channel corresponding to the selected base station;
11 a measuring means for measuring, after the traffic
12 channel is assigned by the selected base station, an electric
13 field strength of a link establishment signal transmitted from
14 the selected base station on the traffic channel;
15 a judging means for judging whether the measured
16 electric field strength of the link establishment signal is not
17 more than a threshold value; and
18 a control means for terminating, if the judging means
19 has judged that the measured electric field strength of the
20 link establishment signal is not more than the threshold value,
21 a link operation that establishes the link for the traffic
22 channel and having the requesting means reissue the traffic
23 channel assignment request on either the control channel
24 corresponding to the selected base station or a control channel
25 corresponding to a newly selected base station.

1 7. The mobile station of Claim 6,
2 wherein the measuring means measures a noise level,
3 which is a reception signal level when no signal is received
4 from the selected base station on the traffic channel,
5 the judging means judges whether a difference between
6 the measured electric field strength of the link establishment
7 signal and the noise level is less than a second threshold
8 value, and
9 the control means has the requesting means reissues the
10 traffic channel assignment request if the difference is less

11 than the second threshold value.

1 8. A base station that assigns a traffic channel to a
2 mobile station and establishes first a link and then a call
3 connection with the mobile station on the traffic channel,
4 comprising:

5 a measuring means for measuring an electric field
6 strength of a signal on the traffic channel when a link
7 operation is performed to establish the link for the traffic
8 channel; and

9 a judging means for judging whether the link operation
10 should be continued according to the measured electric field
11 strength.

1 9. The base station of Claim 8,

2 wherein the measured electric field strength includes
3 a signal level and a noise level, the signal level being a
4 reception signal level when a signal is received from the
5 mobile station on the traffic channel, and the noise level
6 being a reception signal level when no signal is received from
7 the mobile station on the traffic channel, and

8 the judging means judges that the link operation should
9 be terminated if the signal level is not more than a first
10 threshold value or a difference between the signal level and
11 the noise level is not more than a second threshold value.

1 10. A base station that assigns a traffic channel to a

2 mobile station in response to a traffic channel assignment
3 request transmitted from the mobile station on a control
4 channel, and establishes a link with the mobile station on the
5 traffic channel,
6 the base station comprising:
7 a measuring means for measuring an electric field
8 strength of a link establishment signal transmitted from the
9 mobile station on the traffic channel;
10 a judging means for judging whether a link operation
11 that establishes the link for the traffic channel should be
12 continued according to the measured electric field strength of
13 the link establishment signal; and
14 a control means for terminating the link operation if
15 a judgement result of the judging means is negative.

1 11. The base station of Claim 10,
2 wherein the measured electric field strength includes
3 a signal level and a noise level, the signal level being a
4 reception signal level when a signal is received from the
5 mobile station on the traffic channel, and the noise level
6 being a reception signal level when no signal is received from
7 the mobile station on the traffic channel, and
8 the judging means judges that the link operation should
9 be terminated if the signal level is not more than a first
10 threshold value or a difference between the signal level and
11 the noise level is not more than a second threshold value.